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| --- | --- | --- | --- | --- |
| **Category** | **4** | **3** | **2** | **1** |
| **Content Standard-**  **Law of Conservation of energy** | Student demonstrated a complete understanding of how energy is conserved as it is transferred and transformed. | Student demonstrated a good under-standing of how energy is conserved as it is transferred and transformed. | Demonstrated a basic under-standing of how energy is conserved as it is transferred and transformed. | Student demonstrated little or no under-standing of how energy is conserved as it is transferred and transformed. |
| **Content Standard- Forms of energy have a means of transfer** | Student demonstrated a completed understanding of different energy transformations  that occur between different systems (e.g.,  chemical energy in battery converted to  electricity in circuit converted to light and heat  from a bulb) | Student demonstrated a good understanding of different energy transformations  that occur between different systems (e.g.,  chemical energy in battery converted to  electricity in circuit converted to light and heat  from a bulb) | Student demonstrated a basic understanding of different energy transformations  that occur between different systems (e.g.,  chemical energy in battery converted to  electricity in circuit converted to light and heat  from a bulb) | Student demonstrated little or no under-standing of different energy transformations  that occur between different systems (e.g.,  chemical energy in battery converted to  electricity in circuit converted to light and heat  from a bulb) |
| **Presentation of group Wiki with posted data analysis for each members energy usage** | The presentation was excellent with organized content, creative graphics, and a strong oral presentation lasting more than 3 minutes. Student used a strong speaking voice and did not read directly from the presentation. | The presentation was good with most content organized, some creative graphics, and an average oral presentation lasting at least 3 minutes. Student could be heard clearly, but read from the presentation. | The presentation was acceptable with some organized content, a few creative graphics, and an acceptable oral presentation lasting at least five minutes. Student could not be heard well, and read from the presentation. | The presentation was poor with little or no organized content, little creative graphics, and a weak oral presentation lasting less than 5 minutes. Student could not be heard, and had trouble sharing the information in the presentation. |
| **Proposed solutions to save energy posted to the group wiki** | The students solutions proposed were excellent with an organized presentation, creative graphics, and a strong oral presentation. Included four detailed methods for implementation at home. | The students solutions proposed were good with a mostly content organized presentation, some creative graphics, and an average oral presentation. Included three methods for implementation at home. | The students solutions proposed were acceptable with some organized content, a few creative graphics, and an acceptable oral presentation. Included two methods for implementation in the home | The students solutions proposed were poor with little or no organized content, little creative graphics, and a weak oral presentation. Included zero or one methods for implementation in the home. |
| **Collaboration within group individual grade** | My solutions were posted on time and I commented on both my group members’ solutions. | My solutions were partially posted and I commented on only one group member’s solutions. | My solutions were not posted buy I did not comment on any group member’s solutions. | My solutions were not present and I did not comment on any group members solutions. |
| **Comments:** | | | | **Total= /20** |